Joint Surveillance Target Attack Radar System (Joint STARS) Common Ground Station (CGS)



MISSION

Provide long-range radar and other sensor surveillance battle management and targeting data to tactical commanders.

DESCRIPTION AND SPECIFICATIONS

The Joint Surveillance Target Attack Radar System (Joint STARS) Common Ground Station (CGS) is a joint Air Force/Army program. The airborne platform is a United States Air Force E-8 with a multi-mode radar (wide-area surveillance and synthetic aperture modes), 18 operation-and-control consoles, a surveillance and control data link (SCDL), and secure communications. Orbiting a safe distance from the forward line of troops (FLOT), Joint STARS radar scans a wide area of the battlefield.

The radar data is received by Air Force and Army operators aboard the aircraft and downlinked to multiple CGSs via the SCDL. The information provides tactical commanders with near-real-time, wide-area surveillance, and deep-targeting data. The Joint STARS system can detect, locate, and assist in attacking both fixed and moving targets beyond the FLOT during daylight and darkness in nearly all weather conditions.

The CGS is a mobile, tactical, multi-sensor ground station that receives, displays, processes, and disseminates targeting, battle management, and intelligence information to all echelons. In addition to Joint STARS radar data, the CGS is capable of receiving and displaying Airborne Reconnaissance Low (ARL) radar data, Unmanned Aerial Vehicle imagery, and signals intelligence data via an integrated joint tactical terminal. The CGS uses commercial off-the-shelf components, and is housed in a shelter on a High Mobility Multipurpose Wheeled Vehicle (HMMWV). The CGS provides increased functionality over the predecessor Ground Station Module (GSM), which it replaced in FY99. The CGS will be a key node on the digitized battlefield, receiving multiple national, theater, and tactical sensor inputs.

FOREIGN COUNTERPART

Britain: Astor, France: Horizon, Italy: Creso.

FOREIGN MILITARY SALES

None

PROGRAM STATUS

1QFY96 Awarded CGS production contract. **2QFY97** Completed fielding of 16 MGSMs and 4 LGSMs. **3QFY99** Began initial fielding of CGS. **FY99** Completed replacement of all GSMs.

PROJECTED ACTIVITIES

2QFY00 Conduct final phase of operational testing. **4QFY00** CGS full-rate production decision (milestone III). **FY00** Continue fielding.

Begin initial deliveries of the Version 2 preplanned production improvement CGS.

Begin retrofit of Version 1 CGS to Version 2 configuration.

PRIME CONTRACTORS

CGS: Motorola (Scottsdale, AZ)

Datalink: CUBIC Defense Systems (San Diego, CA) **Aircraft:** Northrop Grumman (Melbourne, FL)



* See appendix for list of subcontractors



Attack Radar System (Joint STARS)